

CLAIMS

We claim:

1. A method of planting comprising the steps of:
(a) planting two hybrids in blocks of rows, wherein:
 - 5 (1) the first hybrid is a male fertile maize seed which is homozygous recessive for two desired traits; and
 - (2) the second hybrid is a male sterile maize seed which is homozygous recessive for one of the two desired traits and homozygous dominant for the other desired trait;
- 10 (b) permitting the male fertile maize plants to pollinate said male sterile maize plants; and
- (c) harvesting the resulting maize seed from the two hybrids separately.
2. The method of claim 1, wherein the maize plants have been
15 rendered male sterile by cytoplasmic, genetic, mechanical, chemical, manual or a combination of such methods.
3. The method of claim 1, wherein the hybrids are planted in blocks of
20 rows at least 4 rows wide.
4. The method of claim 3, wherein the hybrids are planted in blocks of rows X rows selected from the group consisting of 6X6, 8X8, 12X12, 12X6, 12X4, and 16X16.
- 25 5. The method of claim 1, wherein the two desired recessive traits are selected from the group consisting of waxy (*wx1*), sugary-1 (*su1*), sugary-2 (*su2*), sugary-3 (*su3*), amylose extender (*ae1*), dull (*du1*), horny (*h*), shrunken-1 (*sh1*), shrunken-2 (*s2*), floury-1 (*fl1*), floury-2 (*fl2*), white endosperm (*y1*), and the opaque series (*o1-o14*).
- 30 6. The method of claim 5, wherein the two desired traits are waxy and sugary-2.
7. A method of planting comprising the steps of:
35 (a) planting two hybrids in blocks of rows, wherein:
 - (1) the first hybrid is a male sterile maize seed which is homozygous recessive for two desired traits; and
 - (2) the second hybrid is a male fertile maize seed which is homozygous recessive for one of the two desired traits and homozygous dominant for
40 the other desired trait;
- (b) permitting the male fertile maize plants to pollinate said male sterile maize plants; and
- (c) harvesting the resulting maize seed from the two hybrids separately.

8. The method of claim 7, wherein the maize plants have been rendered male sterile by cytoplasmic, genetic, mechanical, chemical, manual or a combination of such methods.
- 5 9. The method of claim 7, wherein the hybrids are planted in blocks of rows at least 4 rows wide.
- 10 10. The method of claim 9, wherein the hybrids are planted in blocks of rows X rows selected from the group consisting of 6X6, 8X8, 12X12, 12X6, 12X4, and 16X16.
- 15 11. The method of claim 7, wherein the two desired recessive traits are selected from the group consisting of waxy (*wx1*), sugary-1 (*su1*), sugary-2 (*su2*), sugary-3 (*su3*), amylose extender (*ae1*), dull (*du1*), horny (*h*), shrunken-1 (*sh1*), shrunken-2 (*s2*), floury-1 (*fl1*), floury-2 (*fl2*), white endosperm (*y1*), and the opaque series (*o1-o14*).
- 20 12. The method of claim 11, wherein the two desired traits are waxy and sugary-2.